

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/GB2004/001698

International filing date (day/month/year)
20.04.2004

Priority date (day/month/year)
22.04.2003

International Patent Classification (IPC) or both national classification and IPC
E21B34/14, E21B23/00, E21B23/08

Applicant
SPECIALISED PETROLEUM SERVICES GROUP LIMITED

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**International application No.
PCT/GB2004/001698**JC20 Rec'd PCT/PTO 1 2 OCT 2005****Box No. I Basis of the opinion**

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material:
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing:
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/GB2004/001698

Box No. II Priority

1. ☒ The following document has not been furnished:

☒ copy of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(a)).

☐ translation of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	4-6,8,10-12,14
	No: Claims	1-3,7,9,13
Inventive step (IS)	Yes: Claims	4-6,8,10-12,14
	No: Claims	1-3,7,9,13
Industrial applicability (IA)	Yes: Claims	1-14
	No: Claims	

2. Citations and explanations

see separate sheet

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/GB2004/001698

Re Item V.

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

The following document is referred to in this communication:

D1 : US 2 737 244 A

1 Novelty

- 1.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT.
Document D1 discloses (the references in parenthesis applying to this document) a ball catcher (see point 1.2 below) for selectively retaining drop balls (31,36) in a tool string, the ball catcher comprising a substantially cylindrical body having a main bore (28) running axially therethrough, at least a portion of the main bore (at the lower end) being restrained to a first (at the left-hand side) and a second (at the right-hand side) bore running axially therethrough, the first and second bores being parallel and wherein the first bore includes restriction means (29) at an end thereof.
- 1.2 Although the device of document D1 has a different function than the ball catcher of the application, its construction, and the fact that it is also suitable for capturing at the bottom end a ball released in a position above the bottom end, allow to construe it as a "ball catcher" within the meaning of claim 1.
- 1.3 The same reasoning applies, mutatis mutandis, to the subject-matter of the corresponding independent claim 9, which therefore is also considered not new.
- 1.4 Dependent claims 2, 3, 7 and 13 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty or inventive step, see document D1 and the corresponding passages cited in the search report.
- 1.5 The combination of the features of dependent claims 4 to 6, 8, 10 to 12, and 14 is neither known from, nor rendered obvious by, the available prior art.

2 Clarity

- 2.1 Claim 1 includes the limitation that the ball catcher is "*for selectively retaining drop balls in a tool string*". The only features defining how this is achieved are a first and second bores being parallel, the first bore having restriction means at an end thereof. In the absence of any further features describing the tool, the balls, in a tool as defined by the present claim 1, would **not** be retained **selectively, but randomly**: those that happened to fall into the first bore would be retained, the rest would fall into the second bore and not be retained. Additional features should be included in claim 1 to comply with the requirements of Article 6 PCT. **Features fulfilling this requirement can be found for instance in the present claim 4.**
- 2.2 The same reasoning applies, mutatis mutandis, to the subject-matter of the corresponding independent claim 9, which is therefore also considered not clear. Additionally, it is not clear whether the term "therethrough", in claim 9, step (a), relates to "a first bore" or to "retaining means". This ambiguity should be clarified.

3 Other requirements

- 3.1 The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).
- 3.2 In order to facilitate the examination of the conformity of the amended application with the requirements of Article 19(2) PCT, the applicant is requested to clearly identify the amendments carried out, irrespective of whether they concern amendments by addition, replacement or deletion, and to indicate the passages of the application as filed on which these amendments are based.

If the applicant regards it as appropriate these indications could be submitted in handwritten form on a copy of the relevant parts of the application as filed.